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 IDENTIFIERS New York

ABSTRACT

This volume provides an outline of critical high school equivalency skills in mathematics, a test scoring procedure designed to assess these skills, and a guide to the use of 12 publications which would be useful in instruction. The volume is intended for use by teachers of students who are preparing to take the Test of General Educational Development (GED). In order to use this guide, the teacher first administers the California Achievement Test and scores it using the forms provided. These forms classify items on 74 aspects of mathematics content. The teacher, using this classification to determine which content areas the student must work on, can then refer to the guide to select instructional materials related to the appropriate content area. For each of the 74 topics, materials are classified as useful in lower level reinforcement, upper level reinforcement, or GED test simulation. (SD)

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BUREAU OF CONTINUING EDUCATION CURRICULUM DEVELOPMENT

**A TAXONOMY OF SELECTED
HIGH SCHOOL EQUIVALENCY
MATERIALS**

MATHEMATICS

2

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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THE UNIVERSITY OF THE STATE OF NEW YORK/THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK 12234

FOREWORD

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Chief, Bureau of General Continuing Education
Joseph A. Mangano

Experienced instructors in High School Equivalency programs recognize that the most efficient way of preparing their students for the test of General Educational Development is to administer a diagnostic test and then, based on the responses, prescribe for each student a course of study which will match his or her skill weaknesses and learning preferences with appropriate instructional materials.

However reasonable a diagnostic-prescriptive approach may appear, the amount of time involved in analyzing the items of the testing instrument and teaching materials and correlating them to a list of skills needed to be mastered has effectively hindered the realization of such an instructional system.

This Taxonomy of Selected High School Equivalency Materials in Mathematics will minimize the amount of time it takes for instructors to individualize their programs. This in turn will make it possible for them to devote a greater portion of their time to making more precise diagnoses, implementing individualized instruction prescriptions, and assessing mastery of skills.

George K. Tregaskis, associate, Bureau of Continuing Education Curriculum Development, coordinated the work of Herman Castle of the Washington Irving Adult Center, Schenectady, and Peter Ceballos of the Adult Learning Center, Albany, who developed the list of requisite skills and then completed the necessary analysis of tests and instructional materials. Joseph A. Mangano, Chief, Bureau of General Continuing Education, and Fredric Paul, associate, Bureau of Mathematics Education, contributed helpful suggestions during the initial planning stages of this publication.

HERBERT BOTHAMLEY, Chief
Bureau of Continuing Education
Curriculum Development

GORDON E. VAN HOOFT, Director
Division of Curriculum Development

INTRODUCTION

This taxonomy has been developed as a tool to be used by instructors of High School Equivalency classes who are seeking an efficient system for preparing their students for the Test of General Educational Development. The system made possible by this taxonomy focuses exclusively on the development of those mathematics skills considered critical for the student to have mastered in order to successfully complete a High School Equivalency program. The skills are outlined on the third card in this taxonomy.

There are two stages to the system. The first is an inventory of an individual's high school equivalency mathematics skills. The second is a prescription of materials that could be used to introduce and/or reinforce any of the skills the student has not mastered. The instruments suggested for the inventory are the California Achievement Test, Forms 4-A or 5-A. The instructional materials suggested are five New York State Education Department publications plus ten commercially available programs. The titles and sources of all material referred to in this taxonomy are listed on the back of this card.

The CAT was chosen for the diagnostic inventory because it is the test frequently administered to all students entering a High School Equivalency program, and it is a test which seems to have some prognostic correlation with the mathematics section of the Test of General Educational Development. The item analysis of this test identifies those questions which assess one or more of the mathematics skills identified as being critical. Thus, by plotting a student's incorrect responses to the items of sections 3, 4, and 5 of the CAT, a profile of his/her high school equivalency math skills can be derived which in turn will provide the basis of the individual's prescription of study.

The plotting can be done on the graphs contained in this taxonomy. It is advised that a set of these graphs be duplicated for each student. In plotting a student's high school equivalency mathematics skills profile, select the graph which corresponds with the form and section or sections of the CAT administered to the student. Record test items answered incorrectly by scanning left to right across the top row and then the bottom row of numbers. If the number of the test item is found in the top row of numbers, scan down the respective column and put a check in the circle. If the number of the test item answered incorrectly is in the bottom row, scan up the respective column and place a mark in the triangle. In sections 4 and 5 scan down only.

When this plotting of a student's incorrect responses is completed, the number of marks in each row should be summed left to right and the total placed in the upper diagonal of the split rectangle in the right column. The number found in the lower diagonal indicates the total number of items on the section or sections which assessed the mathematics skill printed just to the right of the split rectangle. It is now possible to identify these mathematics skills which this student has probably not mastered.

In recording those items answered incorrectly, the instructor will note that not all items from the CAT are indexed. The reason for this is that only those items which tested for the mathematics skills listed are included. Therefore, when plotting a profile, ignore items answered incorrectly which are not indexed in either the top or bottom row of numbers (e.g. items 2 and 5, form 5-A, section 4). These skills must be inventoried using either teacher-made tests or math exercises from the State Education Department publications.

Compression of information has made it necessary to use a number of abbreviations. In the High School Equivalency-Mathematics, published by the New York State Education Department, the first numeral refers to a page number and the second designation refers to the specific section of the outline found on that page. In the Cambridge citations, the large numerals refer to page numbers; the smaller exponents to the test item numbers. The larger numerals following an exponent refer to the page(s) on which an explanation of the correct answer is found (p. 13¹⁸, 18; 23-24 indicates page 13, test item 36 and 38, the answers to which are found on pages 23-24). In the Simon and Schuster citations, the large numerals refer to page numbers; the exponents to specific sections.

In all citations, page numbers followed by an asterisk indicates general background material pertaining to the mathematics skill. It is suggested that students answering incorrectly 50 percent or more of the items of any particular skill begin their study with these basic explanatory references. Some explanation is also integrated into the material on the pages designated for the Steck-Vaughn and Amaco publications. Materials cited on the cards but followed by no specific pages, frame, or item references have been included for format consistency as well as instructor's additions as they judge appropriate.

JOSEPH A. MANGANO, *Chief*
Bureau of General Continuing Education

MARY L. REISS, *Director*
Division of Continuing Education

TITLES AND SOURCES OF MATERIALS

The State Education Department publications are:

- *High School Equivalency Mathematics* (1970)
- *Teaching Adult Basic Computation, Intermediate Level* (1970)
Published by the Bureau of Continuing Education Curriculum Development
- *Graphs and Statistics* (1960)
- *Mathematics 7-8 Handbook* (1969)
Published by the Bureau of Secondary Curriculum Development
- *Operations With Fractions* (1965)
Published by the Bureau of Elementary Curriculum Development

The Commercially available programs are:

- *Basic Essentials of Mathematics, Part One and Part Two, Revised* (1975)
Published by Steck-Vaughn Company, Austin, Texas
- *Preliminary Mathematics Ninth Year Mathematics*
Published by Amco School Publications, Inc., 315 Hudson Street, New York, New York
- *High School Equivalency Books 3 and 4 (Mathematics)* (1970)
Published by Learning Technology Incorporated, Albany, New York
- *General Mathematical Ability* (1973)
Published by Cambridge Book Company, 488 Madison Avenue, New York, New York
- *General Mathematical Ability* (1971)
Published by Simon and Schuster, 1 West 39th Street, New York, New York
- *Iowa Tests of Educational Development* (1960)
Published by Science Research Associates, Inc., 259 Erie Street, Chicago, Illinois
- *California Achievement Tests* (1970)
Published by CTB/McGraw-Hill, Del Monte Research Park, Monterey, California

OUTLINE OF CRITICAL HIGH SCHOOL EQUIVALENCY MATHEMATICAL SKILLS

I. Fundamental operations

A. Whole numbers

1. Adding whole numbers (cd 1).
2. Subtracting whole numbers (cd 2).
3. Multiplying whole numbers (cd 3).
4. Dividing whole numbers (cd 4).

B. Fractions

1. Kinds of fractions
 - a. Recognizing proper fractions (cd 5).
 - b. Recognizing improper fractions (cd 6).
 - c. Recognizing mixed fractions (cd 7).
2. Operations with fractions
 - a. Reducing fractions (cd 8).
 - b. Finding common denominators (cd 9).
 - c. Adding fractions (cd 10).
 - d. Subtracting fractions (cd 11).
 - e. Multiplying fractions (cd 12).
 - f. Dividing fractions (cd 13).
3. Solving word problems involving fractions (cd 14).

C. Decimals

1. Reading and writing decimals (cd 15).
2. Rounding off decimals (cd 16).
3. Adding decimals (cd 17).
4. Subtracting decimals (cd 18).
5. Multiplying decimals (cd 19).
6. Dividing decimals (cd 20).
7. Converting fractions to decimals (cd 21).
8. Solving problems involving decimals (cd 22).

D. Percents

1. Defining meaning of percent (cd 23).
2. Converting percents to fractions (cd 24).
3. Converting percents to decimals (cd 25).
4. Performing operations with percents
 - a. Finding percent of a number (cd 26).
 - b. Finding what percent one number is of another (cd 27).
 - c. Finding a number given its percent (cd 28).
5. Solving word problems involving percents
 - a. Solving general word problems involving percent (cd 29).
 - b. Determining discount (cd 30).
 - c. Determining commission (cd 31).
 - d. Determining interest (cd 32).
6. Interpreting circle graphs (cd 33).

E. Ratio and proportion

1. Defining ratio (cd 34).
2. Expressing ratio (cd 35).
3. Defining proportions (cd 36).
4. Operations with proportions
 - a. Solving proportions (cd 37).
 - b. Solving similar polygon problems (cd 38).

F. Properties of numbers

1. Defining prime numbers (cd 39).

2. Finding prime factors (cd 40).

3. Finding square roots (cd 41).
4. Adding signed numbers (cd 42).
5. Subtracting signed numbers (cd 43).
6. Multiplying signed numbers (cd 44).
7. Dividing signed numbers (cd 45).

II. New Math

A. Defining sets (cd 46).

- B. Operations with sets
 1. Finding the intersection of a set (cd 47).
 2. Finding the union of a set (cd 48).

III. Algebra

A. Simple equations

1. Recognizing the symbols of equality and inequality (cd 49).
2. Solving equations and inequalities (cd 50).

B. Evaluation of algebraic expressions and formulas

1. Evaluating expressions (cd 51).
2. Evaluating expressions with exponents (cd 52).
3. Using parentheses (cd 53).
4. Using algebraic formulas (cd 54).

C. Verbal problems

1. Writing sentences as equations (cd 55).
2. Solving verbal problems (cd 56).

D. Monomials and polynomials

1. Operations with monomials
 - a. Adding and subtracting monomials (cd 57).
 - b. Multiplying and dividing monomials (cd 58).
2. Operations with polynomials
 - a. Adding and subtracting polynomials (cd 59).
 - b. Multiplying and dividing polynomials (cd 60).

E. Factoring

1. Factoring polynomials (cd 61).
2. Factoring the difference of two perfect squares (cd 62).
3. Factoring quadratic expressions (cd 63).

F. Solving simultaneous equations (cd 64).

G. Measurement

1. Understanding types of measurements (cd 65).
2. Converting unit measurements within a system (cd 66).
3. Applying formulas
 - a. Finding area (cd 67).
 - b. Finding volume (cd 68).
4. Interpreting graphs
 - a. Understanding types of graphs (cd 69).
 - b. Interpreting graphs (cd 70).

IV. Geometry

- A. Defining types of angles (cd 71).
- B. Defining types of triangles (cd 72).
- C. Solving problems with the Pythagorean Theorem (cd 73).
- D. Graphing equations (cd 74).

CAT LEVEL 4

FORM A

SECTION 3 (COMPUTATION)

STUDENT

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
○	○	○																						3 Addition of whole numbers cd 1
				○	○	○	○																	4 Subtraction of whole numbers cd 2
△	△	△	△																					4 Multiplication of whole numbers cd 3
				△	△	△	△					△	△											6 Division of whole numbers cd 4
								○	○	○	○													4 Addition of fractions cd 10
														○	○					○	○			4 Subtraction of fractions cd 11
								△	△	△	△													4 Multiplication of fractions cd 12
														△						△	△	△	△	5 Division of fractions cd 13
																		○	○					2 Addition of decimals cd 17
												○	○									○		3 Subtraction of decimals cd 18
																	△	△						2 Multiplication of decimals cd 19
														△										2 Division of decimals cd 20
				○												○								2 Addition of signed numbers cd 42
																		△						1 Multiplication of signed numbers cd 44
																△	○						○	3 Converting unit measurements cd 66
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	

CAT LEVEL 4

FORM A

SECTION 4 (CONCEPTS)

STUDENT _____

1	2	6	7	8	10	13	15	17	18	19	21	22	24	25	26	27	28	29	31	32	33	34	35	
																								3
																								Reading and writing decimals cd 15
																								2
																								Rounding off decimals cd 16
																								1
																								Converting fractions to decimals cd 21
																								1
																								Defining meaning of percent cd 23
																								1
																								Solving proportions cd 37
																								1
																								Finding prime factors cd 40
																								1
																								Finding square roots cd 41
																								1
																								Recognizing the symbols of = and $\neq$ cd 49
																								5
																								Solving equations and inequalities cd 50
																								1
																								Evaluating expressions cd 51
																								2
																								Evaluating expressions with exponents cd 52
																								1
																								Using parentheses cd 53
																								4
																								Using algebraic formulas cd 54
																								1
																								Defining types of angles cd 71

CAT LEVEL 4

FORM A

SECTION 5 (PROBLEMS)

STUDENT _____

2	4	5	6	8	9	10	11	12	13	14	15	
	○											1 Solving word problems involving fractions cd 14
							○		○	○		3 Solving general word problems involving percent cd 29
											○	1 Determining discount cd 30
					○							1 Determining commission cd 31
								○				1 Determining interest cd 32
		○	○	○								3 Finding area cd 67
						○						1 Finding volume cd 68
○												1 Interpreting graphs cd 70

SECTION 3 (COMPUTATION)

STUDENT _____

10

CAT LEVEL 5

FORM A

SECTION 4 (CONCEPTS)

STUDENT _____

	1	3	4	6	7	9	10	14	16	17	18	19	21	22	24	25	26	27	28	30	32	34	35
Reducing fractions cd 8																○							
Finding common denominators (lowest common multiple) cd 9																				○			
Reading and writing decimals cd 15					○			○															
Converting fractions to decimals cd 21			○															○					
Converting percents to decimals cd 25																					○		
Finding prime factors cd 40		○																					
Adding signed numbers cd 42								○															
Defining sets cd 46								○		○													
Recognizing the symbols of = and ≠ cd 49	○									○				○									
Solving equations and inequalities cd 50				○									○					○					
Evaluating expressions cd 51							○																
Evaluating expressions with exponents cd 52						○									○		○						
Using parentheses cd 53												○							○				
Using algebraic formulas cd 54														○									
Finding area cd 67																							
Interpreting graphs cd 70																						○	

CAT LEVEL 5

FORM A

SECTION 5 (PROBLEMS)

STUDENT _____

2	6	7	9	10	11	12	14	15	
△									Solving word problems involving fractions cd 14
						△			Solving problems involving decimals cd 22
		△	△	△	△		△		Solving general word problems involving percent cd 29
								△	Determining discount cd 30

FUNDAMENTAL OPERATIONS

ADDING WHOLE NUMBERS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 5, sect. 3a

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 3-9, 22, 89

Part Two
p. 85

Preliminary Mathematics
(Amsco, 1965)
pp. 13-16

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

FUNDAMENTAL OPERATIONS

SUBTRACTING WHOLE NUMBERS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 7, sect. 7a

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 11-14, 23, 90

Part Two
p. 85

Preliminary Mathematics
(Amsco, 1965)
pp. 16-18

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Test of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item 18

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item 2

FUNDAMENTAL OPERATIONS

MULTIPLYING WHOLE NUMBERS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 6, sect. 3b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 16-21, 91

Part Two
p. 85

Preliminary Mathematics
(Amsco, 1965)
pp. 19-24

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item 19

Iowa Tests of
Educational Development,
Form Y-4, Test
(Science Research
Associates, 1960)
Items 2
8

FUNDAMENTAL OPERATIONS

DIVIDING WHOLE NUMBERS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 7, sect. 7b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 24-31, 92

Part Two
p. 85

Preliminary Mathematics
(Amsco, 1965)
pp. 25-31

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 13, sect. 5

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
p. 37

Part Two

Preliminary Mathematics
(Amsco, 1965)
p. 33

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 19-21
Frames 26-49

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 16*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 8¹⁻¹

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

FRACTIONS

RECOGNIZING IMPROPER FRACTIONS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 13, sect. 5

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
p. 36

Part Two

Preliminary Mathematics
(Amsco, 1965)
p. 33

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 22-25
Frames 50-58

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 16*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 58-9
p. 81-2

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa test of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

Operations with Fractions
(NWEA, 1965) pp. 4-5

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
p. 36

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 36-38

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frames 77-82

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 16*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 5³⁻⁴
p. 8¹⁻², 1-3

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

OPERATIONS WITH FRACTIONS

REDUCING FRACTIONS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 10, 1

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
p. 37

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 34-35

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 68-76

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 17*
p. 17 ex. 1¹⁻²⁰; 25-26

General Mathematical Ability
(Simon and Schuster, 1971)
p. 5^{1, 6}
p. 9¹⁻⁴

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form V-4, Test 4
(Science Research
Associates, 1960)
Item 1

OPERATIONS WITH FRACTIONS

FINDING COMMON DENOMINATORS

Instruction

*Teaching Adult Basic Computation
Intermediate Level (NYSEB, 1970) p. 27*

Lower level reinforcement

*Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
p. 39*

21 Part Two

*Preliminary Mathematics
(Amsco, 1965)
pp. 41-43*

*High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 57-67
Frames 90-104*

Upper level reinforcement

*General Mathematical Ability
(Cambridge, 1969)
p. 18*
p. 18 ex. 2¹⁻¹⁰; 26*

*General Mathematical Ability
(Simon and Schuster, 1971)
p. 6¹⁸*

*Ninth Year Mathematics
(Amsco, 1966)*

*High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame*

GED test simulation

*Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item*

*Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item*

OPERATIONS WITH FRACTIONS

ADDING FRACTIONS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 13, sect. 6

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 35, 38, 40-42, 93

Part Two
p. 86

Preliminary Mathematics
(Amsco, 1965)
pp. 43-47

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 83-89
Frames 101-110

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 19*
p. 19 ex. 3¹⁻²⁵; 26-27

General Mathematical Ability
(Simon and Schuster, 1971)
p. 5², 6, 11-12
p. 6¹⁴
p. 10¹⁻⁸
p. 12¹⁻¹¹

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

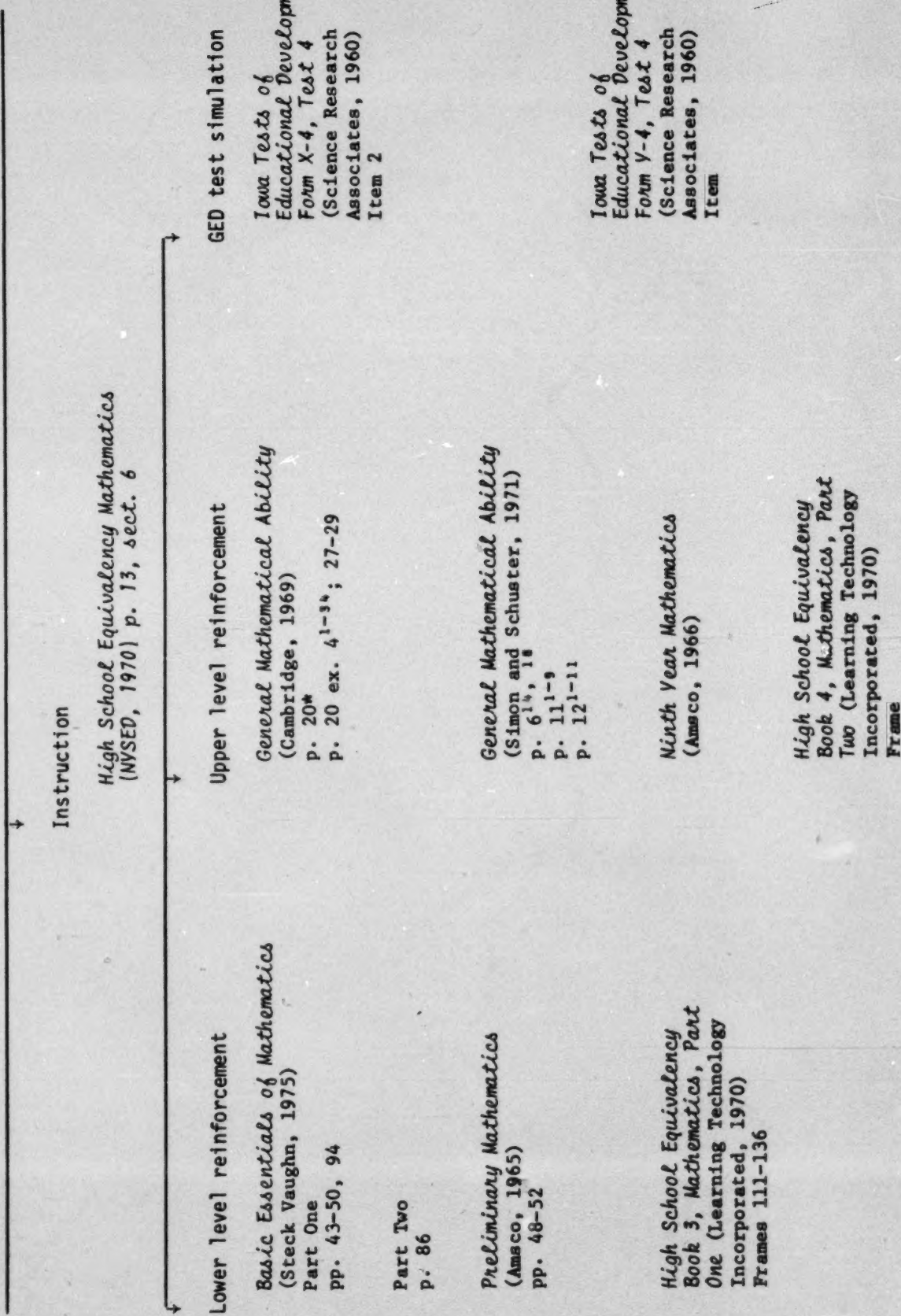
GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

OPERATIONS WITH FRACTIONS

SUBTRACTING FRACTIONS



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OPERATIONS WITH FRACTIONS

MULTIPLYING FRACTIONS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 11, sect. 2

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 52-56, 61, 63

Part Two
p. 86

Preliminary Mathematics
(Amsco, 1965)
pp. 52-59

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 138-158

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 21-22*
p. 22 ex. 5¹⁻²; 29-30
p. 23 ex. 6¹⁻²; ex. 7¹⁻²⁵; 30-31

General Mathematical Ability
(Simon and Schuster, 1971)
p. 57-9
p. 616-17, 20
p. 91-5
p. 101-7
p. 121-11

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

OPERATIONS WITH FRACTIONS

DIVIDING FRACTIONS

Instruction

High School Equivalency Mathematics
(NVSED, 1970) p. 12, sect. 4

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 57-61, 63

Part Two
p. 86

Preliminary Mathematics
(Amsco, 1965)
pp. 60-68

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 159-179

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 23*
p. 24 ex. 8¹⁻²⁴; 31-33

General Mathematical Ability
(Simon and Schuster, 1971)
p. 5⁸
p. 6¹³, 15, 19
p. 10¹⁻⁶
p. 12¹⁻¹⁰, 1-11

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

Teaching Adult Basic Computation, Intermediate Level
(NVSED, 1970) pp. 33, 45, 52, 66, 69

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 45-46, 52-54, 56,
58, 59, 63

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 45, 50, 52, 54, 56,
58-59, 61, 63-64,
66, 68

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 291-304

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)
p. 510

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item 51

DECIMALS

READING AND WRITING DECIMALS

Instruction

Mathematics 7-8 Handbook
(NYSED, 1969) pp. 19-21

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 64-66, 68, 95

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 70-71

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 184-210

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 34*
p. 34 ex. 1¹⁻²; 41

General Mathematical Ability
(Simon and Schuster, 1971)

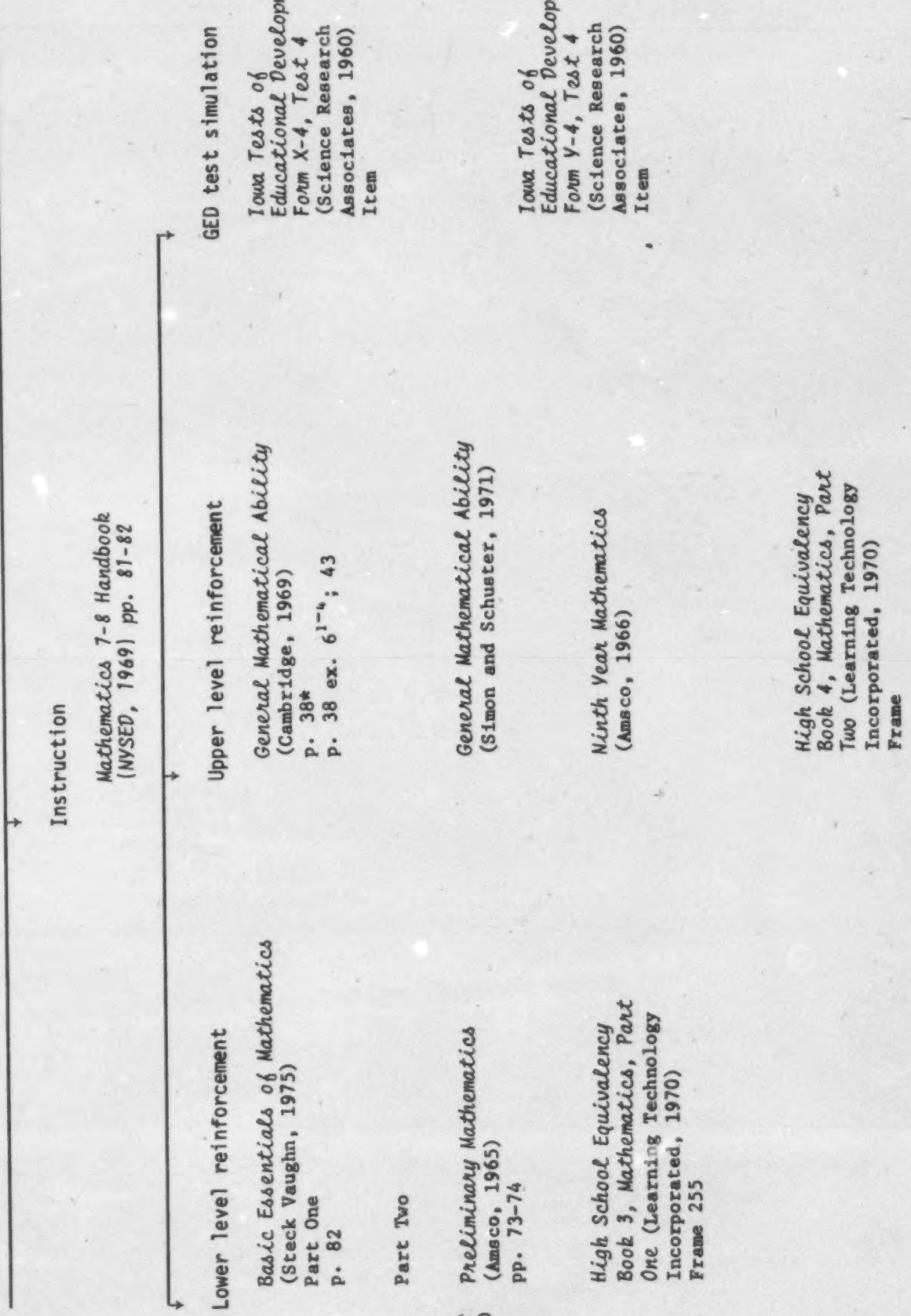
Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item 3

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item



DECIMALS

Instruction

High School Equivalency Mathematics
(NWEA, 1970) p. 15, sect. 7

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 35*
p. 35 ex. 2¹⁻²⁵; 41

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 66, 69, 96

Part Two
p. 87

Preliminary Mathematics
(Amaco, 1965)
pp. 74-76

General Mathematical Ability
(Simon and Schuster, 1971)
p. 13³, 8
p. 15¹⁻¹⁵

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Ninth Year Mathematics
(Amaco, 1966)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
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High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

DECIMALS

SUBTRACTING DECIMALS

Instruction

Mathematics 7-8 Handbook
(NYSED, 1969) p. 83

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 70-71, 96

Part Two
p. 87

Preliminary Mathematics
(Amsco, 1965)
pp. 77-78

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 215-218

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 35-36*
p. 36 ex. 3¹⁻²⁹; 41

General Mathematical Ability
(Simon and Schuster, 1971)
p. 13⁶
p. 16¹⁻¹⁶

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NVSED, 1970) p. 15, sect. 2

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 75-79, 85, 96

Part Two
p. 87

Preliminary Mathematics
(Amsco, 1965)
pp. 79-84

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frames 219-232

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 36-37*
p. 37 ex. 4¹⁻²; 41-42

General Mathematical Ability
(Simon and Schuster, 1971)
p. 13^{2, 4, 9}
p. 15¹⁻¹³
p. 16¹⁻¹⁷

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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DECIMALS

DIVIDING DECIMALS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 16, sect. 3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 80, 83-85, 96

Part Two
p. 87

Preliminary Mathematics
(Amsco, 1965)
pp. 84-91

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frames 233-254

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 37-38*
p. 38 ex. 5¹⁻⁹; 42

General Mathematical Ability
(Simon and Schuster, 1971)
p. 13³
p. 15¹⁻¹³
p. 16¹⁻¹⁸

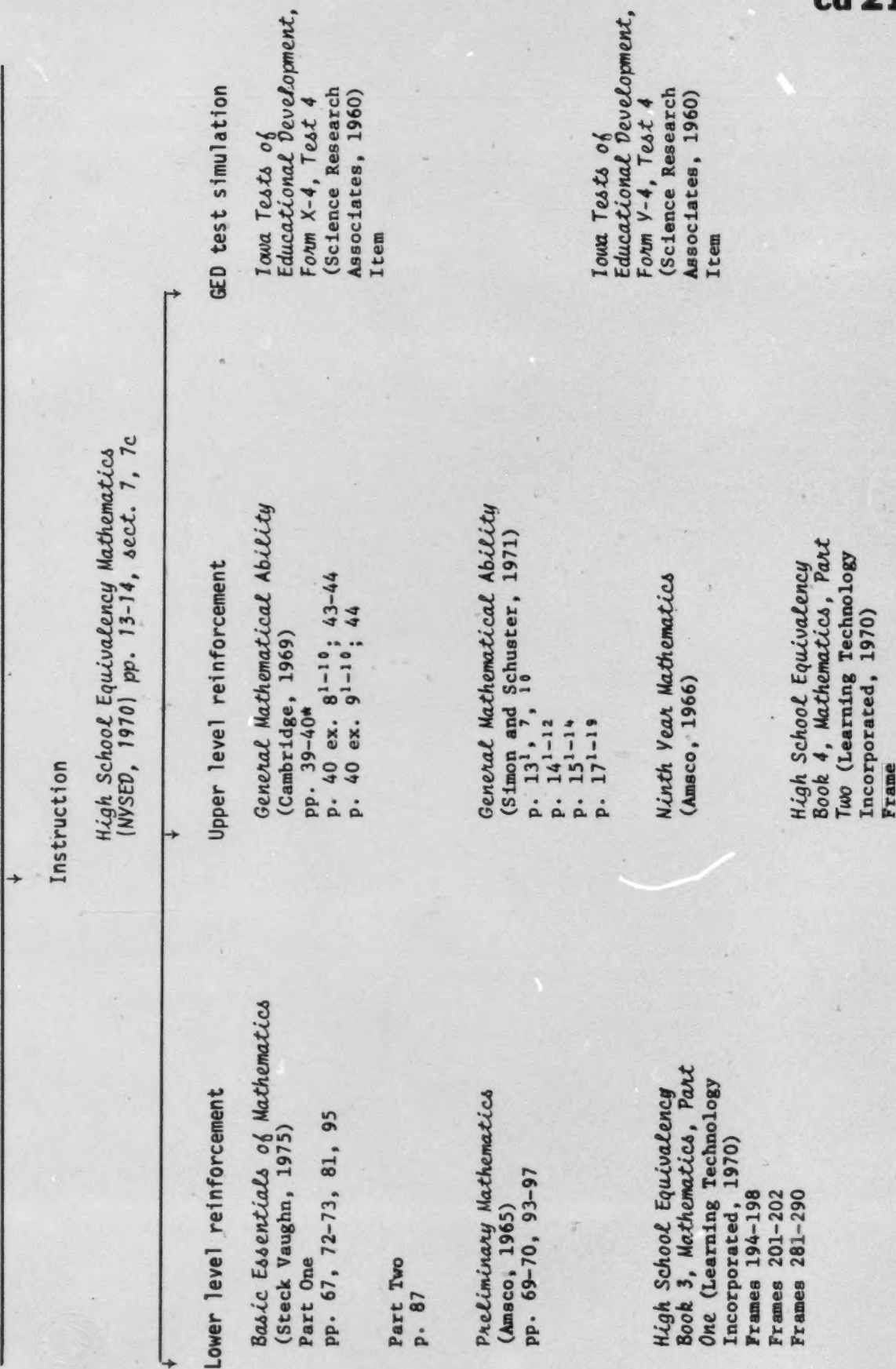
Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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DECIMALS

SOLVING PROBLEMS INVOLVING DECIMALS

Instruction

Teaching Adult Basic Computation, Intermediate Level
(NYSED, 1970) p. 79

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One
pp. 66, 71-73, 76, 79, 83

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 76, 78, 80, 82-84, 86,
89, 92-93, 95

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 257-280

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)
p. 13⁶
p. 17¹⁻²⁰

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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DEFINING MEANING OF PERCENT

PERCENTS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 16, sect. 7a

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 3

Preliminary Mathematics
(Amsco, 1965)
pp. 98-99

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 305-307
Frames 218-219
Frame 247

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 45*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 191-21

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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PERCENTS

CONVERTING PERCENTS TO FRACTIONS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 17, sect. 7b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 5-7, 88

Preliminary Mathematics
(Amsco, 1965)
pp. 101-105

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 308-317
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 46*
p. 46 ex. 3¹⁻²; 59-60

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18^{1, 6}
p. 19¹⁻²¹
p. 20¹⁻²²
p. 21¹⁻²³

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

PERCENTS

CONVERTING PERCENTS TO DECIMALS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 17, sect. 7c

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 4, 6-7, 88

Preliminary Mathematics
(Amsco, 1965)
pp. 99-101

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 344-346

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 45*
p. 45 ex. 2¹⁻³²; 59

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18¹⁻³
p. 19¹⁻²¹
p. 20¹⁻²²
p. 21¹⁻²³

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
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GED test simulation

Iowa Tests of
Educational Development
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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PERCENTS

FINDING PERCENT OF A NUMBER

Instruction

High School Equivalency Mathematics
(NIVSED, 1970) p. 18, sect. 1

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 18

Preliminary Mathematics
(Amsco, 1965)
pp. 106-107

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 348-355
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 47*
p. 47 ex. 4¹⁻¹⁶; 60-61

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18⁸
p. 22¹⁻²⁵

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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PERCENTS FINDING WHAT PERCENT ONE NUMBER IS OF ANOTHER

Instruction			
Lower level reinforcement	Upper level reinforcement	GED test simulation	
Basic Essentials of Mathematics (Steck Vaughn, 1975) Part One Part Two p. 22 Preliminary Mathematics (Amsco, 1965) pp. 107-109 High School Equivalency Book 3, Mathematics, Part One (Learning Technology Incorporated, 1970) Frames 320-323 Frames 336-360	High School Equivalency Mathematics (NVSED, 1970) p. 18, sect. 2 General Mathematical Ability (Cambridge, 1969) p. 48* p. 48 ex. 5¹⁻¹⁵; 61-63 General Mathematical Ability (Simon and Schuster, 1971) p. 22¹⁻²⁵ Ninth Year Mathematics (Amsco, 1966) High School Equivalency Book 4, Mathematics, Part Two (Learning Technology Incorporated, 1970) Frame	Iowa Tests of Educational Development, Form X-4, Test 4 (Science Research Associates, 1960) Items 5 28 Iowa Tests of Educational Development, Form V-4, Test 4 (Science Research Associates, 1960) Items 11 26	

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High School Equivalency Mathematics
(NYSEB, 1970) p. 18, sect. 3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 19-20

Preliminary Mathematics
(Amsco, 1965)
pp. 110-111

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 361-366

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 49*
p. 49 ex. 6¹⁻¹⁰; 63

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18⁷
p. 23¹⁻²⁵

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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PERCENTS

SOLVING GENERAL WORD PROBLEMS INVOLVING PERCENTS

Instruction

Mathematics 7-8 Handbook
(NYSSED, 1969) p. 116

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 8-10, 12-13, 89

Preliminary Mathematics
(Amsco, 1965)
pp. 111-115

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 367-379

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 50*
p. 51 ex. 7¹⁻¹⁰; 64

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18²

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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Frames 293-294
Frame 304

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
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Associates, 1960)
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Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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PERCENTS

DETERMINING DISCOUNT

Instruction

Mathematics 7-8 Handbook
(NYSEB, 1969) p. 115

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 3

Preliminary Mathematics
(Amsco, 1965)
pp. 157-158

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 384-385

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 52*
p. 53 ex. 8¹⁻¹⁰; 64-65

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18¹⁰
p. 22¹⁻²⁴

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

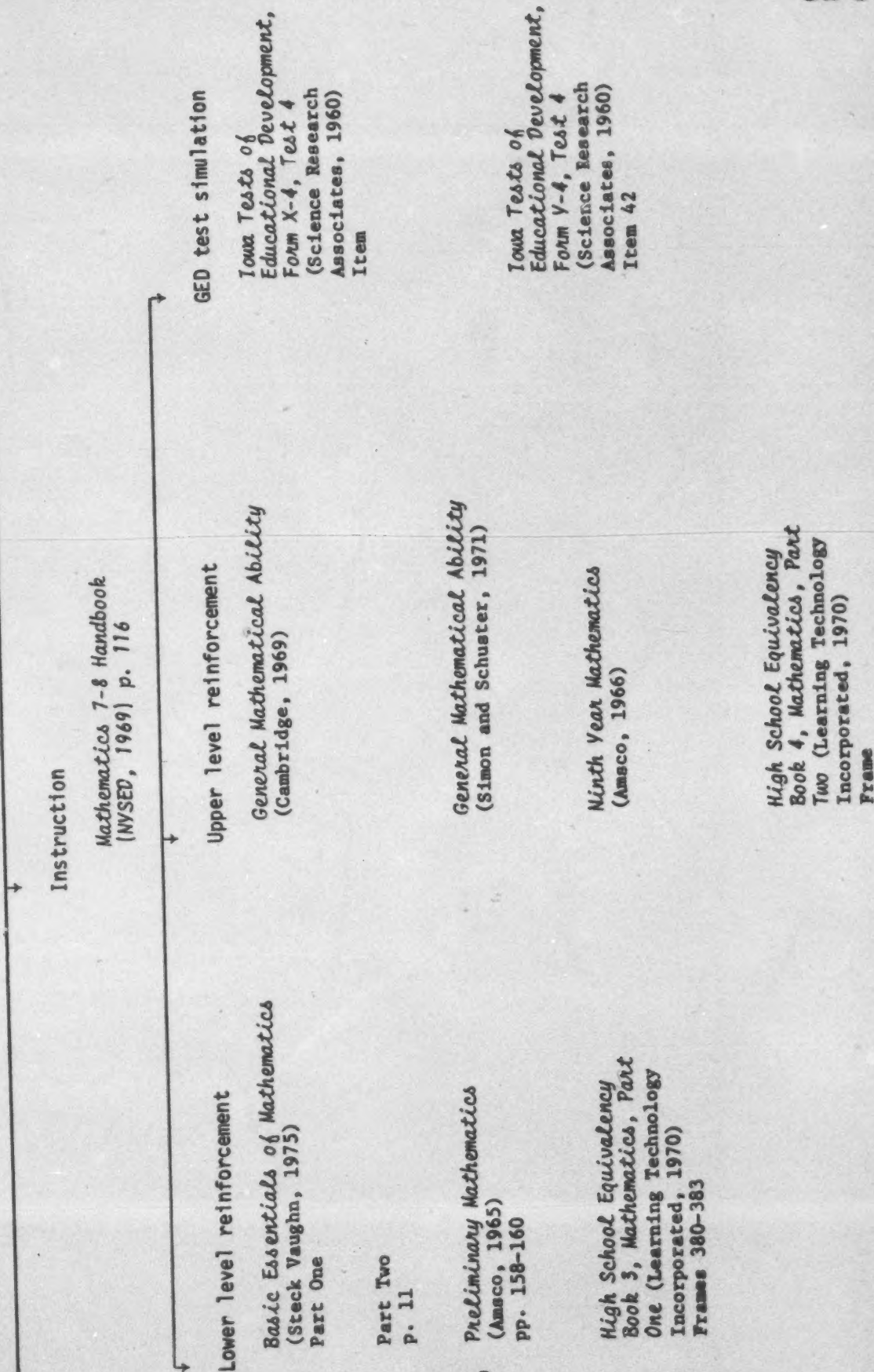
GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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DETERMINING COMMISSION

PERCENTS



PERCENTS

DETERMINING INTEREST

Instruction

Mathematics 7-8 Handbook
(NYSE, 1969) p. 117

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 14-17, 90

4 *Preliminary Mathematics*
(Amsco, 1965)
pp. 164-169

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frames 386-414

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 56*
p. 57 ex. 11¹⁻⁷; 67-68

General Mathematical Ability
(Simon and Schuster, 1971)
p. 18⁹
p. 21^{1-2*}

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frames 277-281
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GED test simulation

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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PERCENTS

INTERPRETING CIRCLE GRAPHS

Instruction

Graphs and Statistics
(NYSED, 1960) pp. 42-47

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 59

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 73*
p. 74 ex. 3¹⁻³; 78

General Mathematical Ability
(Simon and Schuster, 1971)
p. 109¹⁻⁵
p. 110⁵⁻³

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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DEFINING RATIO

RATIO AND PROPORTION

Instruction

High School Equivalency Mathematics
(NYSE, 1970) p. 32, sect. A

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 73

Preliminary Mathematics
(Amsco, 1965)
p. 173

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 415-426

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 24*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 53²⁻²⁶

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
Item

EXPRESSING RATIO

RATIO AND PROPORTION

Instruction

Mathematics 7-8 Handbook
(NYSED, 1969) p. 108

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 73, 96

Preliminary Mathematics
(Amsco, 1965)
pp. 175-178

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 416-440

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 24*
p. 25 ex. 9¹⁻²; 33

General Mathematical Ability
(Simon and Schuster, 1971)
p. 52¹⁻³

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

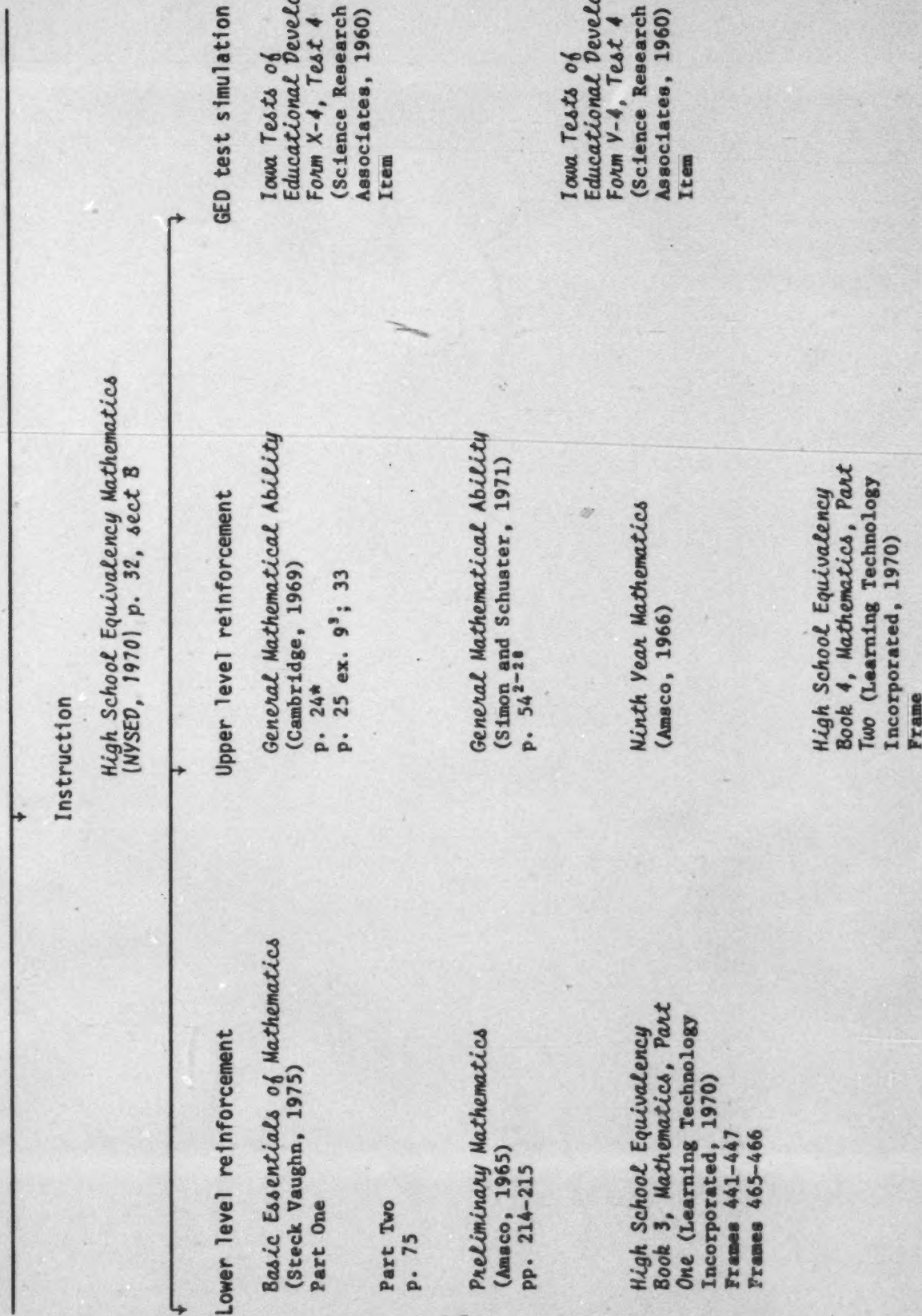
GED simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Items 10
14
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Items 15
25
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RATIO AND PROPORTION

DEFINING PROPORTIONS



RATIO AND PROPORTION

SOLVING PROPORTIONS

Instruction

Mathematics 7-8 Handbook
(NYSEB, 1969) pp. 109-110

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 75-78, 96

Preliminary Mathematics
(Amsco, 1965)
pp. 216-217

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frames 448-464
Frames 467-473

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 25*
p. 25 ex. 9³; 33

General Mathematical Ability
(Simon and Schuster, 1971)
p. 52³-5, 7-8, 10

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Items 10
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RATIO AND PROPORTION

SOLVING SIMILAR POLYGON PROBLEMS

Instruction

Mathematics 7-8 Handbook
(NYSED, 1969) pp. 145-146

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 80-81

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 162*
p. 163 ex. 2¹⁻⁵; 165

General Mathematical Ability
(Simon and Schuster, 1971)
p. 77³
p. 79³⁻⁵

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

DEFINING PRIME NUMBERS

PROPERTIES OF NUMBERS

Instruction

High School Equivalency Mathematics
(NVSED, 1970) p. 7, sect. 8a

GED test simulation

Iowa Tests of Educational Development, Form X-4, Test 4
(Science Research Associates, 1960)
Item

Iowa Tests of Educational Development, Form Y-4, Test 4
(Science Research Associates, 1960)
Item

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 79*
p. 79 ex. 1¹⁻⁵; 85
p. 79 ex. 2¹⁻⁵; 85

General Mathematical Ability
(Simon and Schuster, 1971)
p. 27⁸
p. 28¹⁻²⁸
p. 30¹⁻²⁹

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency Book 4, Mathematics, Part Two (Learning Technology Incorporated, 1970)
Frame

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency Book 3, Mathematics, Part One (Learning Technology Incorporated, 1970)
Frame

PROPERTIES OF NUMBERS

FINDING PRIME FACTORS

Instruction

Mathematics 7-8 Handbook
(NYSED, 1969) pp. 54-55

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

51 *Preliminary Mathematics*
(Amsco, 1965)

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)
p. 27⁶,
p. 28¹⁻²⁸

Ninth Year Mathematics
(Amsco, 1965)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NVSED, 1970) pp. 19-20, 1-5

GED test simulation

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 80-82
p. 83 ex. 5¹⁻²; 85-86

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

High School Equivalency
(Amsco, 1965)
pp. 229-233

General Mathematical Ability
(Simon and Schuster, 1971)
p. 24^b, 6-8
p. 25¹⁻²⁷

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Items 29
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High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 14-47
Frame 276

PROPERTIES OF NUMBERS

ADDING SIGNED NUMBERS

Instruction
High School Equivalency Mathematics
 (NYSED, 1970) p. 24, sect. 4a

Lower level reinforcement

Basic Essentials of Mathematics
 (Steck Vaughn, 1975)
 Part One

Part Two

Preliminary Mathematics
 (Amsco, 1965)
 pp. 224-228

High School Equivalency
 Book 3, *Mathematics, Part*
 One (Learning Technology
 Incorporated, 1970)
 Frame

Upper level reinforcement

General Mathematical Ability
 (Cambridge, 1969)
 pp. 88-89*
 p. 89 ex. 1¹⁻¹⁰; 91-92

General Mathematical Ability
 (Simon and Schuster, 1971)
 p. 31²⁻³, 7
 p. 32²⁻²

Ninth Year Mathematics
 (Amsco, 1966)

High School Equivalency
 Book 4, *Mathematics, Part*
 Two (Learning Technology
 Incorporated, 1970)
 Frames 67-82

GED test simulation

Iowa Tests of
Educational Development,
 Form X-4, Test 4
 (Science Research
 Associates, 1960)
 Item

Iowa Tests of
Educational Development,
 Form Y-4, Test 4
 (Science Research
 Associates, 1960)
 Item 3

PROPERTIES OF NUMBERS

SUBTRACTING SIGNED NUMBERS

Instruction

Mathematics 7-8 Handbook
(NYSEP, 1969) pp. 86-87

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 89*
p. 90 ex. 2¹⁻¹⁵; 92

(Simon and Schuster, 1971)
p. 31¹, 4⁴⁻⁵
p. 32²⁻¹, 2-2

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 83-96

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

PROPERTIES OF NUMBERS

MULTIPLYING SIGNED NUMBERS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 24, sect. 4b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 90*
p. 91 ex. 3¹; 92

General Mathematical Ability
(Simon and Schuster, 1971)
p. 31⁶, 9
p. 33³-3, 2-5

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 97-103

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

PROPERTIES OF NUMBERS

DIVIDING SIGNED NUMBERS

Instruction

Mathematics 7-8 Handbook
(NYSEB, 1969) p. 91

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 90*
p. 91 ex. 3²; 92

General Mathematical Ability
(Simon and Schuster, 1971)
p. 31⁸, 1⁶
p. 33²⁻⁴, 2-5

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 97-103

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form V-4, Test 4
(Science Research
Associates, 1960)
Item

DEFINING SETS

NEW MATH

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) pp. 2-4, sect. 1-9

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 183-185*
p. 183 ex. 1¹⁻¹⁰; 188
p. 184 ex. 2¹⁻¹²; 188
p. 185 ex. 3¹⁻⁶; 188
p. 185 ex. 4¹⁻⁵; 188
p. 186 ex. 5¹⁻⁶; 188

General Mathematical Ability
(Simon and Schuster, 1971)
p. 95^{1, 5-6}
p. 96⁴⁻¹
p. 97⁴⁻⁵
p. 99⁴⁻⁶
p. 100⁴⁻⁷
p. 102⁴⁻⁸

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 305-342
Frames 353-363

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

FINDING THE INTERSECTION OF A SET

NEW MATH

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 2, sect. 5b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 186*
p. 186 ex. 6¹⁻⁶; 188

General Mathematical Ability
(Simon and Schuster, 1971)
p. 95^{2, 4, 7-9}
p. 96⁴⁻⁵
p. 97⁴⁻⁴

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 249-252

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 2, sect. 5a

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 187*
p. 187 ex. 7¹⁻⁶; 188

General Mathematical Ability
(Simon and Schuster, 1971)
p. 95³, 7-10
p. 96⁴⁻²
p. 97⁴⁻⁴

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 243-248

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSED, 1970) pp. 21, 22, sect. 1-9

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 68

(Amsco, 1965)
pp. 198-199

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 101*

(Simon and Schuster, 1971)
p. 462-20
p. 472-22
p. 631-10
p. 642-37, 2-38
p. 652-39, 2-40
p. 1024-8

Ninth Year Mathematics
(Amsco, 1966)
pp. 78-82

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 364-386

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) pp. 23, 25, sect. 1-3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 69-72

Preliminary Mathematics
(Amsco, 1965)
pp. 200-212

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 101-105*
p. 102 ex. 1¹⁻¹⁰; 105-106
p. 103 ex. 2¹⁻¹⁰; 106-107
p. 104 ex. 3¹⁻¹⁰; 107-108
p. 105 ex. 4¹⁻¹⁰; 108-109

General Mathematical Ability
(Simon and Schuster, 1971)
p. 45²⁻⁴
p. 47²⁻²²
p. 51²⁻²⁴
p. 101¹⁻¹⁰
p. 102⁴⁻⁸

Ninth Year Mathematics
(Amsco, 1966)
pp. 83-102

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 364-386

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSEP, 1970) p. 23, sect. B, 1-3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 186-187

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 110*

p. 110 ex. 1¹-1¹⁰ 112-113

General Mathematical Ability
(Simon and Schuster, 1971)
p. 34¹²

p. 35¹³⁻¹⁵

p. 36²⁻⁶, 2-7,

p. 38²⁻¹¹, 2-12

p. 39²⁻¹³

p. 45¹⁻⁴, 7-10

p. 47²⁻²¹

Ninth Year Mathematics
(Amsco, 1966)

pp. 14-15, 19, 20

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form V-4, Test 4
(Science Research
Associates, 1960)
Item 38

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 22, sect. 10

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 187-188

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 110*
p. 111 ex. 2¹⁻¹⁰; 113

General Mathematical Ability
(Simon and Schuster, 1971)
p. 24¹⁻³, 5, 9-10
p. 25¹⁻²⁶
p. 31⁹
p. 33²⁻⁵

Ninth Year Mathematics
(Amsco, 1966)
pp. 17-19

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 104-111

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Items 40
52

Instruction

Teaching Adult Basic Computation,
Intermediate Level (NYSED, 1970) pp. 91-101

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 111*

General Mathematical Ability
(Simon and Schuster, 1971)
p. 34²⁻⁴
p. 36²⁻⁷
p. 38²⁻¹²

Ninth Year Mathematics
(Amsco, 1966)
pp. 15-17

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED tests simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

Teaching Adult Basic Computation,
Intermediate Level (NYSED, 1970) pp. 91-101

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 63-67

G. Preliminary Mathematics
C. (Amsco, 1965)
pp. 188-190

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 111*
p. 112 ex. 4¹⁻¹⁰; 114-115

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
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Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
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(Science Research
Associates, 1960)
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Instruction

*Teaching Adult Basic Computation,
Intermediate Level (NYSED, 1970) pp. 91-101*

Lower level reinforcement

*Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One*

Part Two

*Preliminary Mathematics
(Amsco, 1965)
pp. 194-196*

*High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame*

Upper level reinforcement

*General Mathematical Ability
(Cambridge, 1969)
p. 116*
p. 117 ex. 1¹⁻¹⁰; 121*

*General Mathematical Ability
(Simon and Schuster, 1971)
p. 34⁹⁻¹¹*

*Ninth Year Mathematics
(Amsco, 1966)
pp. 80-82*

*High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame*

GED test simulation

*Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Items 12
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40*

*Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item 20*

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 26, sect. D, 1-2; p. 31, sect. d

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)
pp. 218-221

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

pp. 117-120*
p. 118 ex. 2¹⁻⁶; 121-122
p. 118 ex. 3¹⁻⁶; 122-123
p. 119 ex. 4¹⁻⁶; 123-124
p. 120 ex. 5¹⁻⁶; 124-125

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)
pp. 88-90

High School Equivalency
Book 4, *Mathematics, Part*
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Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
Items 6
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44
47
51

Instruction

High School Equivalency Mathematics
(NYSED, 1970) p. 30, sect. 5b

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)
p. 228

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 126-127*
p. 126 ex. 1¹⁻¹⁰; 133
p. 127 ex. 2¹⁻¹⁰; 133

General Mathematical Ability
(Simon and Schuster, 1971)
p. 34^{1, 5}
p. 45²⁻³

Ninth Year Mathematics
(Amsco, 1966)
pp. 145-148

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
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Associates, 1960)
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Iowa Tests of
Educational Development,
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Associates, 1960)
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Instruction

High School Equivalency Mathematics (NVSED, 1970)
p. 27, sect. E 1-2; pp. 30-31, sect. 5a, 5c

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amasco, 1965)

High School Equivalency
Book 3, Mathematics, Part
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Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 127-129*
p. 128 ex. 3¹⁻¹⁵; 133
p. 128 ex. 4¹⁻¹⁰; 133
p. 129 ex. 5¹⁻¹⁵; 133

General Mathematical Ability
(Simon and Schuster, 1971)
p. 34^{3, 8}

Ninth Year Mathematics
(Amasco, 1966)
pp. 150-151
pp. 153-154

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

Ninth Year Mathematics
(Amsco, 1966) pp. 156-161

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 129-130*
p. 130 ex. 6¹⁻¹⁰; 133-134

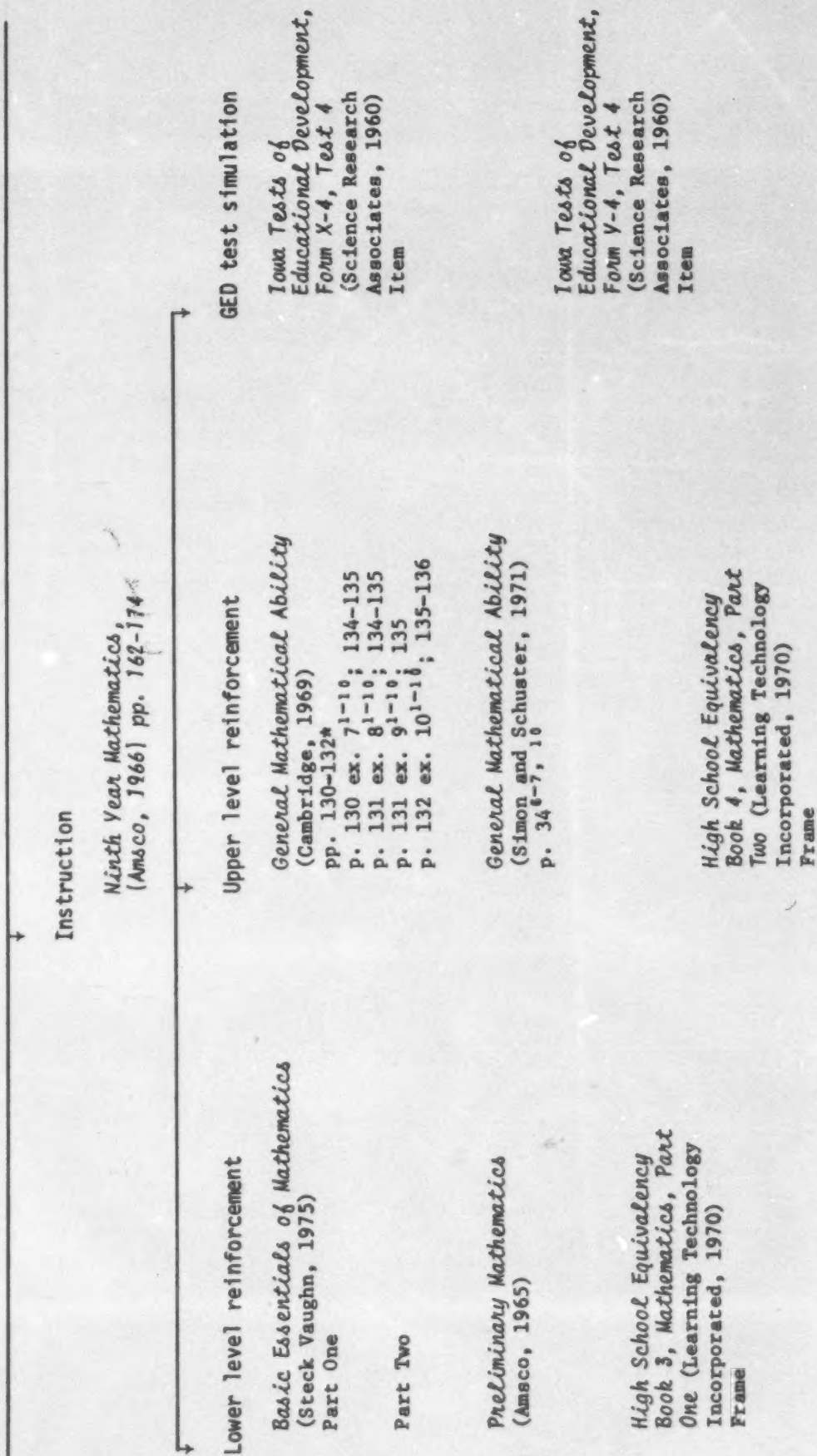
General Mathematical Ability
(Simon and Schuster, 1971)
p. 45⁴, 7-8

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item



Instruction

Ninth Year Mathematics
(Amsco, 1966) pp. 259-264

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 137*
p. 137 ex. 1¹⁻¹⁰; 139

General Mathematical Ability
(Simon and Schuster, 1971)
p. 40¹⁻⁴, 6-10
p. 41²⁻¹⁴, 2-15
p. 42²⁻¹⁷
p. 43²⁻¹⁹

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

Ninth Year Mathematics
(Amsco, 1966) pp. 265-267

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 137-138*
p. 138 ex. 2¹⁻¹⁰; 139

General Mathematical Ability
(Simon and Schuster, 1971)
p. 40⁵
p. 42²⁻¹⁶

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSEP, 1970) p. 23, sect. 12; p. 29, sect. 4

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 140-142*
p. 141 ex. 1¹⁻²⁰; 142-144
p. 142 ex. 2¹⁻⁵; 144-145

General Mathematical Ability
(Simon and Schuster, 1971)
p. 42²⁻¹⁷
p. 43²⁻¹⁸
p. 45³⁻⁶
p. 49²⁻²³

Ninth Year Mathematics
(Amsco, 1966)
pp. 270-275

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
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(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form V-4, Test 4
(Science Research
Associates, 1960)
Item

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 58, sect. 3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
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Incorporated, 1970)
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 146*
p. 147 ex. 1¹⁻⁶; 147

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)
pp. 394-401

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
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GED test simulation

Iowa Tests of
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(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item

MEASUREMENT

UNDERSTANDING TYPES OF MEASUREMENTS

Instruction

High School Equivalency Mathematics
(NYSED, 1970) pp. 44-45, sect. A-E

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 27

Preliminary Mathematics
(Amsco, 1965)
pp. 115-126

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)
p. 56¹⁻⁵
p. 57²⁻³¹, 2-32
p. 58²⁻³³
p. 60²⁻³⁴

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
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GED test simulation

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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MEASUREMENT

CONVERTING UNIT MEASUREMENTS WITHIN A SYSTEM

Instruction

High School Equivalency Mathematics
(NVSSED, 1970) p. 45, sect. C-E

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 28-35

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)

General Mathematical Ability
(Simon and Schuster, 1971)
p. 125^{1, 3}

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
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Incorporated, 1970)
Frames 297, 299-300

GED test simulation

Iowa Tests of
Educational Development,
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(Science Research
Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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MEASUREMENT

Instruction

High School Equivalency Mathematics
(NYSED, 1970) pp. 46-48, sect. 1-5

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 40-41

Preliminary Mathematics
(Amasco, 1965)
pp. 268-278

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 168-169*
p. 171 ex. 2¹⁻¹⁷; 175-176

General Mathematical Ability
(Simon and Schuster, 1971)
p. 92^{1, 3, 5-7, 9}
p. 93³⁻⁶

Ninth Year Mathematics
pp. 339-340

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
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Frames 137-175

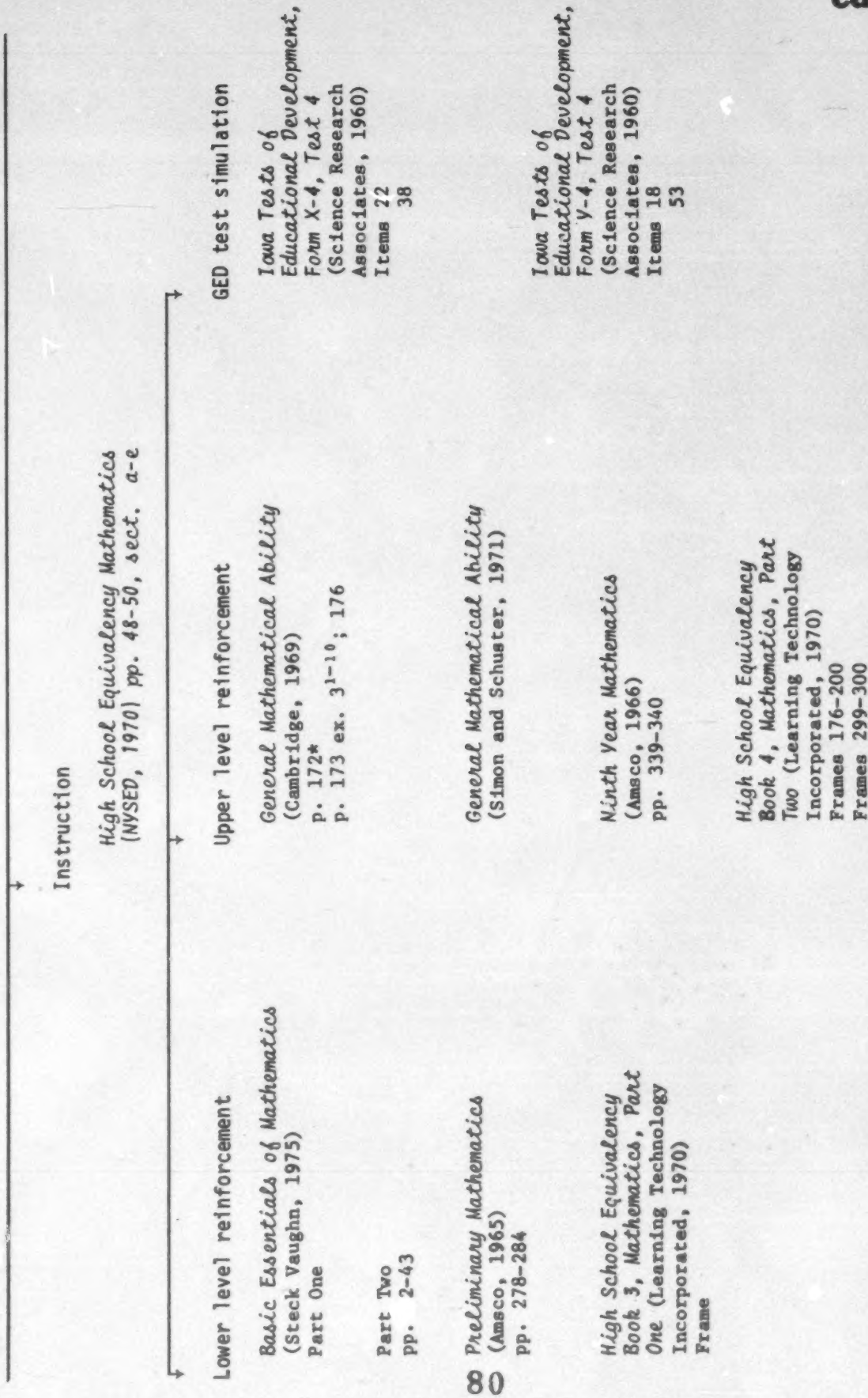
GED test simulation

Iowa Tests of
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Associates, 1960)
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
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Associates, 1960)
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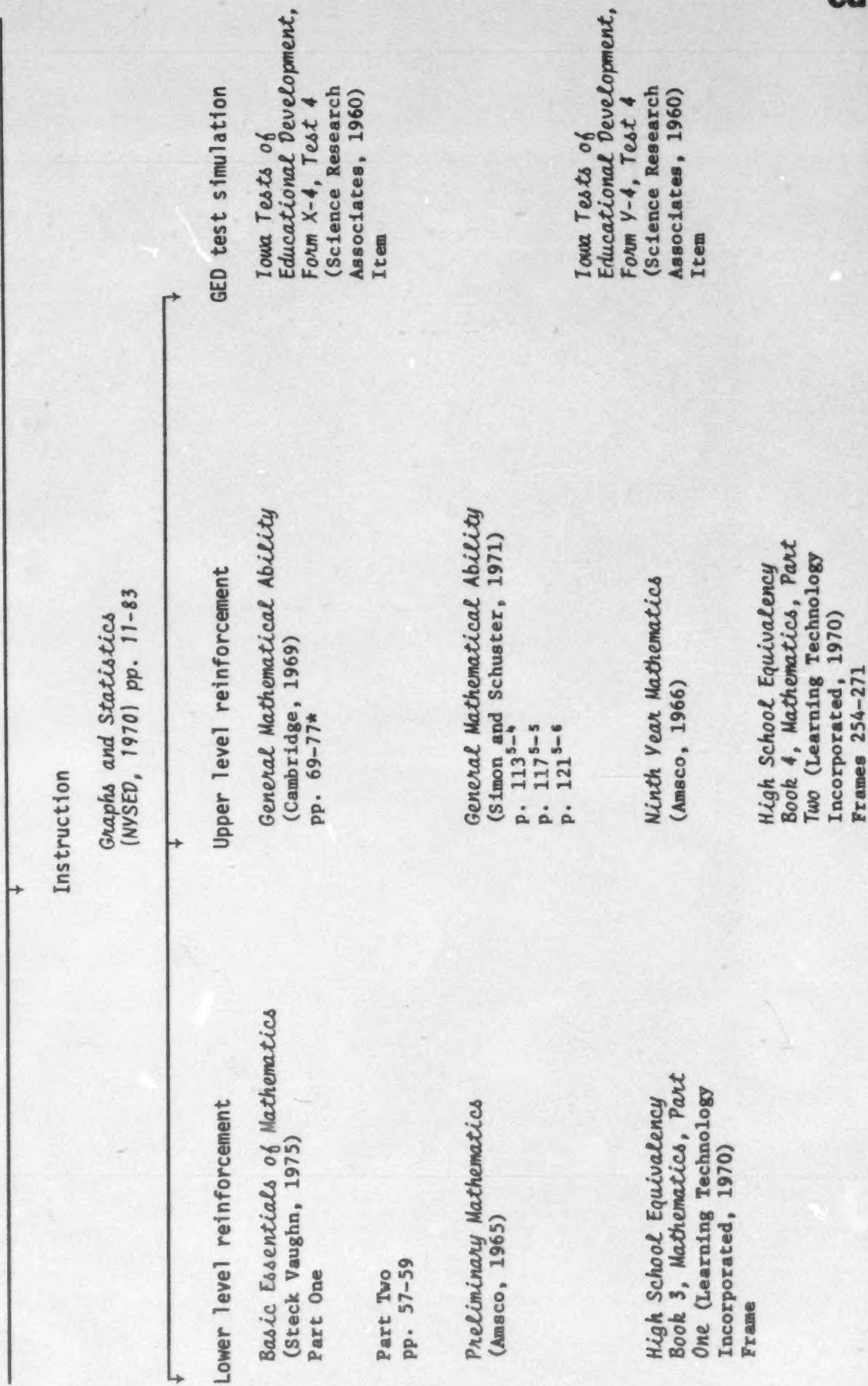
MEASUREMENT

FINDING VOLUME



MEASUREMENT

UNDERSTANDING TYPES OF GRAPHS



MEASUREMENT

INTERPRETING GRAPHS

Instruction

High School Equivalency Mathematics
(NYSEB, 1970) p. 35, sect. 1-3

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
pp. 57-59

Preliminary Mathematics
(Amsco, 1965)
pp. 290-305

High School Equivalency
Book 3, Mathematics, Part
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
p. 70 ex. 1¹⁻¹⁶; 78
p. 72 ex. 2¹⁻⁶; 78
p. 74 ex. 3¹⁻⁹; 78
p. 76 ex. 4¹⁻¹²; 78

General Mathematical Ability
(Simon and Schuster, 1971)
p. 105^{5-1, 1, 2}
p. 106^{3-5, 5-2}
p. 112¹⁻⁵
p. 116¹⁻⁵
p. 119¹⁻²
p. 120³⁻⁵

Ninth Year Mathematics
(Amsco, 1966)

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
Incorporated, 1970)
Frames 254-271

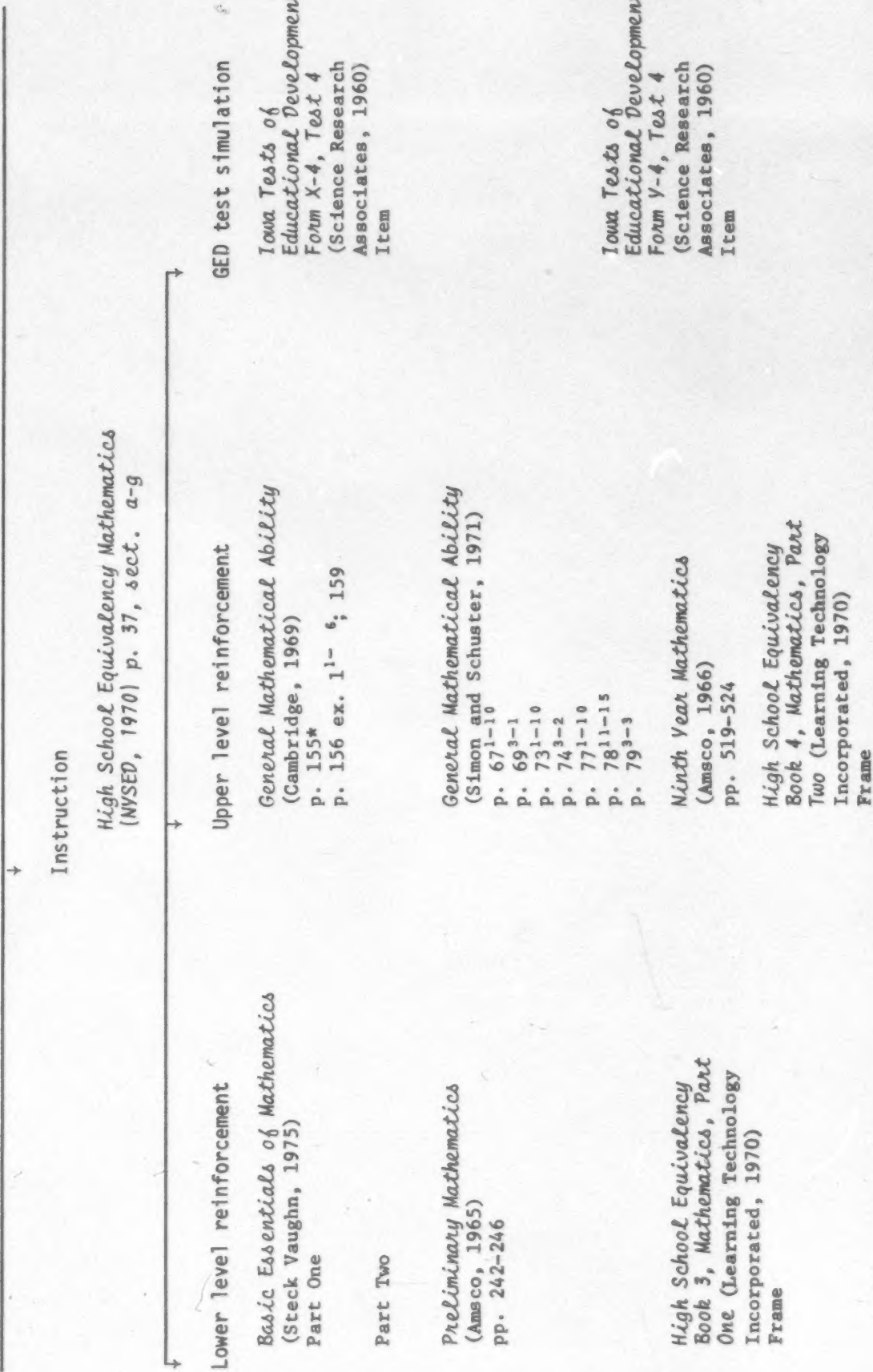
GED test simulation

Iowa Tests of
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6 33
7 39
11 44
15 46
26 49
27 52
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Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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5 41
9 45
22 46
23 50
24

GEOMETRY

DEFINING TYPES OF ANGLES



Instruction	
High School Equivalency Mathematics (NVSSED, 1970) pp. 38, 39, sect. 2b 1-6, p. 40, sect. 4a, p. 41, sect. c	
Lower level reinforcement	GED test simulation
Basic Essentials of Mathematics, (Steck Vaughn, 1975) Part One Part Two pp. 46-48 Preliminary Mathematics (Amsco, 1965) pp. 249-254 High School Equivalency Book 3, Mathematics, Part One	Iowa Tests of Educational Development, Form X-4, Test 4 (Science Research Associates, 1960) Item
Upper level reinforcement	
General Mathematical Ability (Cambridge, 1969) p. 161* p. 162 ex. 1¹⁻⁵; 165 General Mathematical Ability (Simon and Schuster, 1971) p. 82¹⁻¹⁰ p. 83¹¹⁻¹⁵ p. 84³⁻⁴ p. 93³⁻⁶ p. 94³⁻⁷ Ninth Year Mathematics (Amsco, 1966) pp. 524-531 High School Equivalency Book 4, Mathematics, Part Two (Learning Technology Incorporated, 1970) Frame	Iowa Tests of Educational Development, Form V-4, Test 4 (Science Research Associates, 1960) Item 39

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Ninth Year Mathematics
(AMSCO, 1966) pp. 500-505

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two
p. 49

Preliminary Mathematics
(AMSCO, 1965)
pp. 254-256

High School Equivalency
Book 3, *Mathematics, Part*
One (Learning Technology
Incorporated, 1970)
Frame

Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 163-164*
p. 164 ex. 3¹⁻⁶; 166

General Mathematical Ability
(Simon and Schuster, 1971)

High School Equivalency
Book 4, *Mathematics, Part*
Two (Learning Technology
Incorporated, 1970)
Frame

GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
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Instruction

High School Equivalency Mathematics
(NYSED, 1970) pp. 55-57 sect. 1-2

Lower level reinforcement

Basic Essentials of Mathematics
(Steck Vaughn, 1975)
Part One

Part Two

Preliminary Mathematics
(Amsco, 1965)

High School Equivalency
Book 3, Mathematics, Part
One (Learning Technology
Incorporated, 1970)
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Upper level reinforcement

General Mathematical Ability
(Cambridge, 1969)
pp. 177-178*
p. 178 ex. 1¹⁻⁴; 178

General Mathematical Ability
(Simon and Schuster, 1971)

Ninth Year Mathematics
(Amsco, 1966)
pp. 360-398

High School Equivalency
Book 4, Mathematics, Part
Two (Learning Technology
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GED test simulation

Iowa Tests of
Educational Development,
Form X-4, Test 4
(Science Research
Associates, 1960)
Item

Iowa Tests of
Educational Development,
Form Y-4, Test 4
(Science Research
Associates, 1960)
Item